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<PREAMB>

<AGENCY TYPE='S'>ENVIRONMENTAL PROTECTION AGENCY

<CFR>40 CFR Parts 122, 123, 124, and 125

<DEPDOC>[EPA-HQ-OW-2008-0667, FRL – 9681-5]

<RIN>RIN 2040–AE95

<SUBJECT>National Pollutant Discharge Elimination System — Proposed Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities; Notice of Data Availability Related to EPA’s Stated Preference Survey

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Data Availability.

SUMMARY: On April 20, 2011, EPA published proposed standards for cooling water intake structures at all existing power generating, manufacturing, and industrial facilities as part of implementing section 316(b) of the Clean Water Act (CWA). This notice presents a summary of new information EPA has developed since the rule proposal. The information results from a stated preference survey that EPA conducted after the proposed rule was published. Stated preference surveys are an attempt to determine the economic value of goods or services by means other than by assessing the effects of changes in the market for the goods and services. In this notice EPA solicits comment on the information presented in this notice and on what role, if any, it should play in EPA’s

assessment of the benefits of regulatory options for the final rule, pending completion of the survey and external peer review.

DATES: Comments must be received on or before July 11, 2012.

ADDRESSES: Submit your comments, identified by Docket No. EPA-HQ-OW-2008-0667 by one of the following methods:

- <http://www.regulations.gov>: Follow the on-line instructions for submitting comments.
- E-mail: OW-Docket@epa.gov, Attention Docket ID No. EPA-HQ-OW-2008-0667.
- Mail: Water Docket, U.S. Environmental Protection Agency, Mail Code: 4203M, 1200 Pennsylvania Ave., NW., Washington, DC 20460.
Attention Docket ID No. EPA-HQ-OW-2008-0667. Please include a total of 3 copies. In addition, please mail a copy of your comments on information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St., NW., Washington, DC 20503.
- Hand Delivery: Water Docket, EPA Docket Center, EPA West Building Room 3334, 1301 Constitution Ave., NW., Washington, DC, Attention Docket ID No. EPA-HQ-OW-2008-0667. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information by calling 202-566-2426.

Instructions: Direct your comments to Docket No. EPA-HQ-OW-2008-0667. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider to be CBI or otherwise protected should not be submitted through www.regulations.gov or e-mail. The www.regulations.gov web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through <http://www.regulations.gov> your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available

docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the Water Docket in the EPA Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202-566-1744, and the telephone number for the Water Docket is 202-566-2426.

FOR FURTHER INFORMATION CONTACT: For additional technical information, contact Paul Shriner at 202-566-1076; e-mail: shriner.paul@epa.gov. For additional economic information, contact Erik Helm at 202-566-1049; e-mail: helm.erik@epa.gov or Wendy Hoffman at 202-564-8794; email: hoffman.wendy@epa.gov. For additional biological information, contact Tom Born at 202-566-1001; e-mail: born.tom@epa.gov.

SUPPLEMENTARY INFORMATION

<HD1>Supporting Documentation

<HD2>A. Docket

EPA has established an official public docket for this action under Docket ID No. EPA-HQ-OW-2008-0667. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include information claimed as Confidential Business Information (CBI) or other information for which the disclosure is restricted by statute. For information on how to access materials in the docket, refer to the preceding <E

T='02'>ADDRESSES</E>section. To view docket materials, please call ahead to

schedule an appointment. Every user is entitled to copy 266 pages per day before incurring a charge. The Docket may charge 15 cents for each page over the 266-page limit plus an administrative fee of \$25.00.

<HD2>B. Electronic Access

You may access this Federal Register document and the docket electronically, as well as submit public comments, through the website <http://www.regulations.gov> by searching for Docket ID No. EPA-HQ-OW-2008-0667. For additional information about the public docket, visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

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<HD1>I. Purpose of This Notice

On April 20, 2011, EPA published proposed standards for cooling water intake structures at all existing power generating facilities and existing manufacturing and industrial facilities as part of EPA's implementation of its responsibilities under section 316(b) of the Clean Water Act (CWA), at 76 FR 22174. EPA received voluminous comments and data submissions during the 90-day public comment period. After many

commenters requested additional time to review the proposal, on July 20, 2011, EPA extended the comment period by an additional 30 days (76 FR 43230).

In today's NODA, EPA is providing additional preliminary data that may be relevant to the benefits of the rule, based on the results of a stated preference survey. Stated preference surveys are an attempt to determine the economic value of goods or services outside of the context of the marketplace. Simply described, a stated preference survey attempts to gauge the value of an item through questions designed to mimic consumer decision-making in actual markets. A stated preference survey, in this case, was used to measure values associated with ecosystem improvements. Such values were only partially monetized at proposal. The stated preference survey estimates the value held by the public for ecosystem improvements based on the choices the surveyed members of the public make between hypothetical policy options and current conditions. EPA solicits public comment on all aspects of the study, including the methodology used, the strengths and weaknesses of stated preferences methods generally, and the appropriate role, if any, the study should play in the analysis of the final rule.

EPA notes that the preliminary results presented in this NODA are dependent on the background information that was presented to respondents to the stated preference survey, including information about regional and national impacts on aquatic resources both in the baseline and under various policy scenarios. Thus, these preliminary national and regional results are not directly transferable to site specific assessments.

Section II provides a brief description of the stated preference survey to date, and refers to technical support documents available on EPA's website and in the docket for

the proposal, which includes the data and a set of preliminary statistical results in which each respondent's answers are given similar weight, even as some groups may be over- or underrepresented. Such unweighted results are presented for the Northeast, Southeast, Inland, Pacific regions, and a national survey. EPA is making the preliminary results of this study available for public comment and peer review in order to inform its determination of whether to include these results in the benefits analysis for the final rule.

This information is presented in more detail in a document referred to hereinafter as the Survey Support Document (SSD) (DCN 11-4524). In addition to the unweighted models presented, EPA is also presenting preliminary weighted model results for the Northeast region. At the time this NODA was prepared, EPA had only developed weights for the Northeast region as it is the only region whose non-response study has been completed. The weights control for statistical differences between individuals who responded to the main survey and those individuals who did not respond. Weighted models for the remaining regions and the national surveys are not presented in the technical support documents, but will be made available to the public on EPA's website at a later date.

EPA invites comment on the study's preliminary results, including the extent to which those results are consistent with previous studies of stated or revealed public preferences; ways of assessing the external validity of the underlying per household estimates and implied aggregate WTP, for example by comparison with estimates in the published literature of WTP for increased species abundance or other ecosystem attributes; and whether further analyses are needed, and if so what analyses might be

most useful. EPA also invites comment on how the certainty associated with the environmental attributes in this survey accord with certainty levels in other stated preference surveys, and whether that could affect responses.

EPA's rationale for the preferred regulatory option is detailed in the BTA Consideration section of EPA's proposal (76 FR 22174, Section VI). This notice is intended only to offer additional information collected as a result of conducting a stated preference survey. Several key elements of that proposal are worth restating. "EPA concluded that closed cycle cooling is not the best technology available for minimizing adverse environmental impact on a national basis" (76 FR 22174, Section VI.E). "Four factors, in particular, led EPA, for this proposal, to reject a uniform standard based on closed cycle cooling" (76 FR 22174, Section VI.E). The four factors have not changed on the basis of data collected through the stated preference survey, nor does EPA anticipate that these factors would be changed by any revisions to the national or regional benefits analysis based on these data, if such revisions are made in the final rule. The four factors are energy reliability, air emissions, land availability, and remaining useful plant life, each of which should be evaluated on a localized basis.

EPA's estimated benefits for this regulation in the original proposal were partial estimates only – EPA was not able to monetize all benefits, especially non-use benefits. As part of the proposal, EPA indicated it was in the process of developing a stated preference survey to estimate total willingness to pay (WTP) for improvements to fishery resources affected by impingement and entrainment (I&E) mortality from in-scope 316(b) facilities (75 FR 42438, July 21, 2010). EPA acknowledged it did not have

sufficient time to fully develop and implement this survey for the proposed regulation (76 FR 22174). EPA indicated its intent to issue a Notice of Data Availability (NODA) pending survey implementation and data analysis. Section II provides an overview of this new data and preliminary analysis for the Northeast, Southeast, Inland, and Pacific regions as well as the national survey, and refers to the technical support documents on EPA's website. EPA presents a set of unweighted models that do not account for possible systematic variations between the populations of individuals that responded and did not respond to the surveys. The survey non-response assessment work has been completed for the Northeast region; therefore EPA presents a weighted model which statistically adjusts for the differences among those populations for that region. EPA has not yet completed the non-response assessments for the Pacific, Southeast, and Inland regions and the national survey. EPA does not plan to publish another NODA presenting the full set of adjusted results. Instead, EPA will post these results on its web site at <http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/>. EPA encourages the interested public to monitor this web site periodically for additional information about the survey. EPA will also add the technical support documents to the docket for this rule, and interested parties may wish to sign up for the notification feature for this docket at [regulations.gov](http://www.regulations.gov), to be notified automatically via email when these results are posted. This notice is intended to apprise the public of the preliminary results of the stated preference survey, make this information available for public review, and provide an opportunity for the public to comment on this new information. EPA has not decided whether to use the results of the stated preference survey in the benefits analysis for the

final rule. After completing the non-response studies, conducting scope and validity testing, and reviewing and responding to public comment, EPA will revise its results (including a summary of the public comments) and present these materials for external peer review. After making any additional revisions based on the peer review, EPA will determine whether the monetized benefits based on the stated preference survey should be included in the benefits analysis for the final rule, and if so, what role they should play. However, EPA notes that the Agency is not reopening the proposed rule for comment through this notice.

<HD1>II. Willingness to Pay Survey

In today's NODA, EPA is documenting the availability of data collected from a stated preference survey designed to facilitate the estimation of households' willingness to pay to reduce the number of fish impinged or entrained in cooling water intake structures. Stated preference methods provide a non-market approach to quantifying values associated with ecosystem improvements, such as increased protection of aquatic species or the restoration of habitats with specific attributes. These methods rely on an analysis of responses to survey questions through which individuals state information about their values.

Estimation of monetized non-use benefits is challenging, since market proxies are generally not available, and in the absence of such proxies, they can only be estimated by using either stated preference methods or benefits transfer based on prior stated preference results. For this reason, non-use benefits are often discussed qualitatively instead of attaching monetized values to them. Today's notice presents data collected

from a stated preference study (EPA ICR # 2402.01) that EPA conducted regarding total (use plus non-use) benefits from reductions in fish mortality at cooling water intake structures. EPA's peer-reviewed guidelines for benefits analysis (U.S. EPA 2010, pp. 7-41, DCN 11-4712) recognize "advantages of [stated preference] methods includ[ing] their ability to estimate non-use values and to incorporate hypothetical scenarios that closely correspond to a policy case."

The data described in this NODA were collected using a stated preference survey based on a "choice experiment" design. Choice experiments involve asking survey respondents to indicate their most preferred option from a set of two or more hypothetical options and a "status quo" or "no policy" option. The options differ in the levels of environmental improvements and impose different costs on the respondent's household.

Stated preference methods have "... been tested and validated through years of research and are widely accepted by ... government agencies and the U.S. courts as reliable techniques for estimating non-market values" (Bergstrom and Ready 2009, p. 26, DCN 11-4762). EPA's own peer reviewed Guidelines for Preparing Economic Analysis (US EPA 2010, DCN 11-4712) indicates that the use of stated preference study data, when the study is conducted properly in accord with best current practices, is the only potential method for monetizing non-use values. Nonetheless, EPA recognizes that several issues have been raised regarding the estimation of welfare values from stated preference surveys. For example, the stated preference study discussed in this NODA creates a hypothetical market where respondents are asked to state their values for increases in "fish saved" in conjunction with increases in fish populations (total and

commercial) and aquatic conditions by voting for or against alternative hypothetical policies that would regulate cooling water intake structures and that would impose increases in annual household cost of living. The issue of whether respondents are capable of respecting hypothetical budget constraints, knowing that their responses to the survey would not compel them to incur any costs, is a concern that has been cited as a reason to question the results of stated preference studies. The hypothetical nature of the market has raised questions as to whether this type of elicitation accurately reveals and elicits WTP associated with the good being considered.

Substantial research has been conducted over the past two decades on hypothetical bias in stated preference surveys. While many studies have found evidence of hypothetical bias (List and Gallet 2001, DCN 11-4763), a recent meta-analysis indicates that “hypothetical bias in SP studies may not be as important” as some have argued previously (Murphy et al. 2005, DCN 11-4764). This mirrors similar findings in prior studies that compare hypothetical and actual referenda (see discussion in Johnston 2006, DCN 11-4765). EPA solicits comment on the degree to which the potential for hypothetical bias may still be present in the 316(b) survey, and whether EPA has taken appropriate steps to ameliorate issues of bias and to what degree potential biases may have been reduced.

Stated preference surveys also require the provision of information to enable respondents to comprehend the potential implications of their hypothetical choices. For example, in this case, respondents may not be aware that the “fish saved” by actions addressing cooling water intake structures include large numbers of eggs and larvae as

well as fish, or that the vast majority of those organisms are species that provide no consumptive use (e.g., commercial or recreational fishing) to humans. Even if they are aware of this issue in a general way, it is unlikely that most respondents will have previously considered what preserving those species is worth to them. In order to elicit informed responses, it is necessary to provide information to respondents about the general context and scope of the issue. Following standard practice, EPA pretested the information provided to respondents in focus groups and cognitive interviews to determine what quantity and types of information were required by respondents in order to feel confident and well-informed in their responses (DCN 11-4710). For example, in the introductory materials accompanying the four regional and national stated preference surveys, EPA presents the number of “young adult fish” (also called “age-one-equivalents”) that are “lost” in coastal and fresh waters due to cooling water use and notes that these losses include eggs and larvae. That educational material was designed to inform survey respondents that reported effects on “fish saved per year” in the valuation questions partially result from reduced mortality of eggs and larvae. The presentation of this type of background information, if not properly vetted in the survey instrument development process, can result in focusing respondent attention on particular environmental amenities to the exclusion of other market and non-market goods that may also be important to some respondents’ decision making with regard to the choice questions.

Consistent with established best practices for stated preference surveys, EPA has sought to minimize possible biases by careful and thorough construction and testing of

the survey instrument. The Agency recognizes that potential biases may still remain and may influence the results of the study. While in EPA's view, the study incorporates current best professional practice in the conduct of stated preference studies, EPA acknowledges that the results of any empirical study depend on the methodology applied. EPA has not yet completed its statistical analyses of these survey data and therefore has not determined whether the results of the stated preference survey will play a role in the benefits analysis for the final rule, and if so what role they will play. EPA requests comment on these issues.

At the time this NODA was prepared, EPA had finished fielding all five versions of the main mail survey (four regional and one national). EPA undertook the Northeast version in advance of the other versions as a pilot study to inform potential changes to other survey versions, as described in the ICR for the 316(b) stated preference survey (EPA ICR # 2402.01) and as recommended in published guidance for stated preference survey design (Arrow et al. 1993, DCN 11-4701; Bateman et al. 2002, DCN 11-4702). As noted above, the preliminary results of the survey are available in the docket and at <http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/>.

EPA notes that the stated preference survey regions differ from the benefits regions used in the Environmental and Economic Benefits Assessment (EEBA) document for the proposed rule.¹ The Agency will perform additional analysis comparing the results of the regional survey versions to the results of the national survey version. This additional analysis will allow EPA to look at the impacts of program size (regional vs.

¹ See Exhibit II-3 of the Survey Support Document for a list of the states included in each region.

national) on willingness to pay and consider the implications of any differences for the validity of results. Before considering any application of this information in the final rule, EPA will also provide the full results and public comments to the planned peer-review panel. EPA does not regard these data as ready for consideration for use in any benefit cost analysis at this time until the results of additional EPA internal review, public comment and independent peer review have been completed. For the final benefits analysis, EPA may present a range for the total national benefit estimates produced by the stated preference research. Alternatively, EPA may decide not to use the results from this study, and instead to consider non-use benefits qualitatively and/or by using benefits transfer, as was done for the proposed rule.

At the time this NODA was prepared, EPA had produced preliminary estimates of average willingness-to-pay per household per percentage point improvement in each of the attributes, based on unweighted models (see Section II.E of the Survey Support Document for more details). For example, the average dollar value per household per percentage point of reduced fish mortality at cooling water intake structures ranges from \$0.75 and \$0.78 in the Southeast and Inland regions, respectively, to \$1.12 and \$1.13 in the Northeast and national versions, respectively, to \$2.52 in the Pacific region.

EPA is also conducting a non-response study for each version of the survey, to account for the possibility that respondents are fundamentally different from non-respondents. EPA would use the non-response study results to develop weights that correct for any differences, reducing the weight placed on overrepresented respondent groups, while increasing the weight placed on any underrepresented respondent groups.

See Section II.G of the Survey Support Document for details on the non-response study for the Northeast region of the survey (the only region for which the non-response study has been completed to date). EPA emphasizes that the relationship between unweighted and weighted models for the Northeast may not be the same for the other regional and national versions. EPA currently is still fielding the non-response studies for the other three regional and national versions of the survey. EPA intends to complete weighted models for the remaining regions and the national surveys. After completing the non-response studies for all regions, reviewing public comment, and conducting additional scope and validity testing, EPA will present a more complete set of stated preference survey materials for an external peer review.

EPA invites comment on the study's preliminary results, including the extent to which those results are consistent with previous studies of stated or revealed public preferences; ways of assessing the external validity of the underlying per household estimates and implied aggregate WTP, for example by comparison with estimates in the published literature of WTP for increased species abundance or other ecosystem attributes; whether further analyses are needed, and if so what analyses might be most useful; and the certainty levels of attributes in this survey. After reviewing and responding to public comment, the results from the planned external peer review, and additional validity testing informed by public comment, EPA will determine whether the results of the stated preference survey should be included in the benefits analysis for the final rule, and if so, what role they should play.

This notice is intended to apprise the public of the new information, make this information available for public review and provide an opportunity to comment on the new information that the Agency has collected. However, EPA notes that the Agency is not reopening the proposed rule for comment through this notice.

<HD1>III. General Solicitation of Comment

EPA encourages public participation and requests comments on all aspects of the data and analyses presented in this notice of data availability and in the SSD that EPA is making available on its website.

EPA invites all parties to coordinate their data collection activities with the Agency to facilitate mutually beneficial and cost-effective data submissions. Please refer to the <E T='02'>**FOR FURTHER INFORMATION CONTACT**</E> section at the beginning of this preamble for technical contacts at EPA.

To ensure that EPA can properly respond to comments, the Agency prefers that commenters cite, where possible, the paragraph(s) or sections in the document or supporting documents to which each comment refers. Please submit copies of your comments and enclosures (including references) as specified in the <E T='02'>**ADDRESSES**</E> section at the beginning of this notice.

<SIG><DATED>Dated: June 1, 2012.

<NAME>Nancy K. Stoner,

<TITLE>Acting Assistant Administrator,

Office of Water. </SIG>

<FRDOC> [FR Doc. 2012-14104 Filed 06-08-12; 8:45 am]

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